

1. (currently amended) A polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.949 to 0.955 g/cm<sup>3</sup> at 23 °C and a MFI<sub>190/5</sub> in the range from 0.1 to 0.3 dg/min or a MFI<sub>190/21.6</sub> in the range of 4 to 6 dg/min, and which comprises from 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A[,]; from 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and ~~from another~~ a first 1-olefin comonomer having from 4 to 8 carbon atoms[,]; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer, wherein all of the percentage data are based on the total weight of the molding composition.
2. (currently amended) ~~A~~The polyethylene composition as claimed in claim 1, wherein the ~~high-molecular-mass copolymer B contains small proportions~~ first 1-olefin comonomer is present in an amount of from 0.1 to 0.2 % by weight of ~~co-monomer having from 4 to 8 carbon atoms~~, based on the weight of copolymer B, and ~~wherein the ultrahigh-molecular-mass ethylene copolymer C contains an amount in the range~~ the second 1-olefin comonomer is present from 2 to 3 % by weight of co-monomers, based on the weight of copolymer C.
3. (currently amended) ~~A~~The polyethylene composition as claimed in claim 1 ~~or 2, which, as co-monomer, contains~~ wherein the first 1-olefin and second 1-olefin comonomers are independently selected from 1-butene, 1-pentene, 1-hexene, 1-octene, 4-methyl-1-pentene, or a mixture of these.
4. (currently amended) ~~A~~The polyethylene composition as claimed in ~~one or more of claims 1 to 3~~ claim 1, which has a viscosity number VN<sub>tot</sub> in the range of from 460 to 500 cm<sup>3</sup>/g measured to ISO/R 1191 in decalin at 135 °C.
5. (currently amended) ~~A~~The polyethylene composition as claimed in ~~one or more of claims 1 to 4~~ claim 1, which has a swell ratio index in the range of from 175 to 205 %, ~~and a~~

notched impact strength (ISO) in the range of from 30 to 60 kJ/m<sup>2</sup>, and a stress-crack resistance (FNCT) in the range of from 60 to 110 h.

6. (currently amended) A process for producing a polyethylene composition ~~as claimed in one or more of claims 1 to 5~~ with multimodal molecular mass distribution, which has a density in the range of from 0.949 to 0.955 g/cm<sup>3</sup> at 23 °C, a MFI<sub>190/5</sub> in the range from 0.1 to 0.3 dg/min or a MFI<sub>190/21.6</sub> in the range of 4 to 6 dg/min, and which comprises from 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbon atoms; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer, wherein all of the percentage data are based on the total weight of the molding composition, in which ~~wherein~~ the monomers are polymerized in slurry in a temperature range of from 60 to 90 °C at a pressure in the range of from 0.15 to 1 MPa, and in the presence of a high-mileage Ziegler catalyst composed of a transition metal compound and of an organoaluminum compound, ~~which comprises the process comprising~~ conducting polymerization in three stages, where the molecular mass of the polyethylene prepared in each stage is regulated with the aid of hydrogen, thereby forming a hydrogen concentration in each stage.
7. (currently amended) ~~A~~The process as claimed in claim 6, wherein the hydrogen concentration in the first polymerization stage is adjusted so that ~~the~~a viscosity number VN<sub>1</sub> of the low-molecular-weight ~~polyethylenemass ethylene homopolymer~~ polyethylene homopolymer A is in the range of from 160 to 220 cm<sup>3</sup>/g.
8. (currently amended) ~~A~~The process as claimed in claim 6 ~~or 7~~, wherein the hydrogen concentration in the second polymerization stage is adjusted so that ~~the~~a viscosity number VN<sub>2</sub> of ~~the~~a mixture of polymer A and polymer B is in the range of from 250 to 300 cm<sup>3</sup>/g.
9. ~~A~~The process as claimed in ~~any of claims 6 to 8~~claim 6, wherein the hydrogen concentration in the third polymerization stage is adjusted so that ~~the~~a viscosity number

$VN_3$  of the mixture of polymer A, polymer B, and polymer C is in the range of from 460 to 500 cm<sup>3</sup>/g.

10. (currently amended) The use of a process for producing a container having a capacity in a range from 10 to 150 dm<sup>3</sup> (l) from a polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.949 to 0.955 g/cm<sup>3</sup> at 23 °C, a MFI<sub>190/5</sub> in the range from 0.1 to 0.3 dg/min or a MFI<sub>190/21.6</sub> in the range of 4 to 6 dg/min, and which comprises from 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbon atoms; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer, wherein all of the percentage data are based on the total weight of the molding composition as claimed in one or more of claims 1 to 5 for producing large blow moldings, such as containers, with a capacity in the range of from 10 to 150 dm<sup>3</sup> (l), wherein the polyethylene molding composition is first plasticized, the process comprising:
- (a) plasticizing the polyethylene composition in an extruder in a temperature range of from 200 to 250 °C; and is then extruded
  - (b) extruding the product of step (a) through a die into a blow mold[[]]; where it is blown up and then cooled and solidified
  - (c) blowing up the product of step (b) in a blow molding apparatus, thereby forming the container; and
  - (d) solidifying the container by cooling.